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September 30, 1996

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Ms. Kathy Castagna
Regional Project Officer
U.S. EPA New England
Waste Management Division (HPC CAN-7)
JFK Federal Building
Boston, MA 02203

Reference: EPA Contract No. 68-W4-0013; EPA Work Assignment No. R01027; Environmental Indicators Team Support; Final Draft Environmental Indicators Reports

Dear Ms. Castagna:

Enclosed please find the Environmental Indicator Reports for the CEE Associates and East Coast Environmental Services Corporation sites for your review. A complete copy of the reports has been submitted to EPA site managers Ms. Stephanie Carr (CEE Associates) and Mr. Frank Battaglia (East Coast) for review and comment.

Enclosed for your convenience are hard copies of the reports and computer versions on 3.5-inch diskettes formatted in WordPerfect 5.1. Please contact me if you have any questions.

Sincerely,

Mark D. Heaney
Regional Manager

cc: A. Gilbert, EPA New England (letter only)
[redacted]
F. Battaglia, EPA New England
W. Jordan/Central Files
M. Heaney
T. Penhale

CEE Associates
EPA I.D. No. CTD044121697

I. Introduction

The CEE Associates site is located in New Milford, Connecticut approximately 900 feet west of the Housatonic River. A previous owner, Burndy Corporation, began plating operations at the site in 1967. The Burndy property encompassed 20 acres. Burndy sold 8 of the acres, including facility buildings, to CEE Associates in 1983. CEE Associates has two tenants: Diventco Corporation (which occupies 60-70% of the building space) and Colonial Data Technologies Corporation. Burndy sold the remaining 12 acres to Sunny Valley Realty and Development which subdivided its plots for resale (References 3, 17, 22, 27, 28).

From 1967 to 1983, Burndy manufactured plated electrical contacts and terminals generating F001, F006, F007, and F008 hazardous wastes. Spent halogenated solvents (F001) were stored in a 55-gallon drum storage area. Spent cyanide bath solutions and residues (F007 and F008) were disposed in two 18,000-gallon surface impoundments (also referred to as sludge drying beds) and an 18,000-gallon lagoon after being treated in the facility's 4,800-gallon per day wastewater treatment system. Metal hydroxide sludge produced from treatment of electroplating wastewaters (F006) was also routed to the surface impoundments and the lagoon (References 2, 22).

Burndy Corporation completed RCRA closure of the two surface impoundments and the lagoon prior to September 1983 in accordance with a RCRA Closure Plan approved by CTDEP. Diventco Corporation resumed plating operations at the site in 1983 to manufacture printed circuit boards. Limited soil sampling and groundwater monitoring conducted in the surface impoundment and lagoon area in 1989 by Sunny Valley Realty and Development indicated no detectable levels of volatile organic or metals contamination. In 1991, CEE Associates attempted an equivalency demonstration for the "clean" closure of the two surface impoundments and the lagoon; however, this was opposed by the adjacent (and downgradient) R.A. Boehm Facility. Boehm alleged that operations at the former Burndy site contributed to elevated levels of halogenated organic volatiles found in groundwater underlying its site (located downgradient of CEE). No further information regarding the equivalency demonstration was found in the available file material (References 17, 27, 29, 30, 33).

The site is located on glacial deposits which overlie dense, crystalline bedrock. The overburden deposits include sand, gravel and silt deposited by meltwater streams and lake bottom deposits of sand, silt and clay. To the east of the plant, towards the Housatonic river, the overburden consists of stream terrace deposits and recent flood plain alluvium. The deposits beneath the site have a saturated thickness of less than ten feet. Groundwater beneath the site flows east toward the Housatonic River (References 5 and 27).

II. Summary of Releases

Date of Release	Description of Releases
1967 to 1983	Surface Impoundments (2) and Lagoon The two surface impoundments and the lagoon were unlined and earthen and received spent cyanide bath solutions and residues which contained metal plating wastes. Before Burndy closed the two surface impoundments and the lagoon in 1983, four sludge samples and four soil samples (three sets from the surface impoundments, one set from the lagoon) were analyzed for Extraction Procedure (E.P.) Toxicity of lead, cadmium, chromium, copper, nickel, tin, zinc, and cyanide. Analytical results showed that sludge samples leached copper in the 100 to 1,000 milligrams per liter (mg/L) range; however, other constituents generally ranged from 0.01 to 1 mg/L, with the exception of the 66 parts per million (ppm) of lead measured in the lagoon sludge. Soil samples under the sludge leached copper as high as 56 mg/L. Other constituents were present in very low or nondetectable quantities (Reference 22).
1984	Non-permitted discharges to the Housatonic River In November 1984, the Diventco Corporation was reportedly convicted in Superior Court for non-permitted discharges of untreated wastewater to the Housatonic River. The discharges occurred at least twice, on April 2 and June 15, 1984. Tests conducted by CTDEP determined that the wastewaters contained metals such as copper, tin and lead as well as suspended solids (Reference 24).

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III. List of Interim Measures

Date Conducted	Description of Interim Measures
1983	Surface Impoundments and Lagoon The Burndy Corporation determined the amount of soil to be removed from beneath the two surface impoundments and the lagoon by following CTDEP guidelines for areas classified as GB (where groundwater is not suitable for drinking without treatment). Sludge and soil sampling results (noted in the *Section II, Description of Releases* above) were also considered. All soil containing metal concentrations greater than 10 times drinking water standards was excavated. More than twice the originally estimated amount of soil was removed; however, samples of soils remaining after excavation were not collected to verify "clean" closure. Burndy Corporation claimed the potential for metals to migrate from the surface impoundments and the lagoon into groundwater was negligible. The facility claimed clean closure and did not undertake groundwater monitoring. CTDEP accepted the claim that no post-closure monitoring was necessary (Reference 22). *Note:* In 1989, two soil samples and four groundwater samples were taken in the area of the closed lagoon. The soil samples were analyzed for volatile organic compounds (VOCs); E.P. Toxic metals (arsenic, barium, cadmium, chromium, lead, mercury, silver, and selenium); and zinc, nickel, copper and total cyanide. Laboratory analyses of the soil samples indicated that all of the parameters tested were below EPA drinking water standards (Reference 27). The four groundwater samples were analyzed for VOCs and the eight E.P. Toxic metals and nickel and zinc. There were no detectable levels reported for the parameters tested in any of the four groundwater samples (Reference 27).

IV. Human Exposures Controlled (CA725) Determination and Recommended Actions

Human Exposures Controlled Determination (CA725)

Based upon a review of the environmental monitoring data, site operations, and the facility environmental setting (both physical and demographic), it is suggested that CEE Associates cannot be classified as a site where human exposures are controlled (YE determination) or where no control measures are necessary (NC determination). Based upon guidance specified in the July 29, 1994 U.S. EPA "RCRIS Corrective Action Environmental Indicator Event Codes" memorandum, one of two criteria must be met for a YE determination. These are:

1. Remedial measures have been implemented with the result that all maximum contaminants detected or reasonably suspected are less than or equal to their respective action levels (e.g., MCLs for groundwater, a 10^{-6} risk level for other contaminants, or any other number designated as the action level) or do not exceed an Agency specified cleanup standard for the facility and,

2. There is no unacceptable human exposure to any contaminant concentration above action levels that had been detected or is reasonably suspected based on current contaminant concentrations and the current site conditions. Although contamination remains at the facility that may require further remediation, action has been taken or site conditions are otherwise such that unacceptable threats to human health from actual exposure to the contamination are not plausible based on current uses of the site. Such actions may include the use of physical barriers or institutional controls (e.g., deed restrictions or alternative water supply).

CEE Associates does not meet the second criterion due to potential surface water exposure concerns.

The site is located in a commercial, industrial, and residential area. There are private residences about 500 feet west of the plant and one private residence approximately 200 feet to the east. An animal shelter is also located on an adjacent property (References 5, 23, 27).

Groundwater - There are several public wells located within 1 mile of the site. There are also a number of private potable water wells located near the site along Dodd Road. The municipal water supply in the area comes from the New Milford Water Company, which supplies well water to both residences and industries. The public supply wells are located approximately 5 miles upgradient of the site (References 5, 22, 23, 27).

According to a 1988 Final Facilities Evaluation submitted to EPA by PRC Environmental Management, "CTDEP considered the potential for contaminant migration to be low for two reasons. First, the groundwater quality in the New Milford area near the BC [former Bundy Corporation] plant is classified as GB (not suitable for potable [use] unless treated because of existing or past usages). Second, the contaminants of concern remaining after cleanup [of the two surface impoundments and the lagoon], according to the approved closure plan, have a low leaching potential. Therefore, CTDEP did not require BC to perform post-closure groundwater monitoring". The Final Facilities Evaluation continues, "... it appears that, to date [1988], the water supply wells in the New Milford area have not been affected by any past releases of contamination from the BC facility." (Reference 22).

In 1989, four groundwater monitoring wells were installed by Sunny Valley Realty on its portion of the former Burndy property. The depth to groundwater ranged from 5.7 to 10.7 feet below grade. Groundwater samples were analyzed for VOCs, eight EP Toxic metals, nickel, and zinc. There were no detectable levels reported for the parameters tested in any of the four groundwater samples (Reference 27).

Surface water - The Housatonic River, which received Diventco's unpermitted discharges, is located approximately 1,500 feet downgradient of the site. Surface water in the Housatonic River is classified D/B, indicating it may be suitable for bathing or other recreational purposes, certain fish and wildlife habitat, certain industrial processes and cooling, and it may have good aesthetic value - present conditions, however, severely inhibit or preclude one or more of the above uses (References 20, 23 and 27).

Since CEE Associates does not meet the second criterion for a YE determination, it is suggested that the CA725 code be left blank. Note that according to the July 29, 1994 Guidance, "blank spaces or no entries should only be interpreted to mean that the human health risks resulting from a release have not yet been determined at the facility, not that the facility has uncontrolled risks."

Recommended Actions

According to the 1988 Final Facilities Evaluation submitted to EPA by PRC Environmental Management, "PRC examined available documents on the BC facility and found that "clean" closure of the land-based units was not demonstrated by Burndy Corporation because no sampling analysis was conducted after the sludge and contaminated soil had been excavated. No evidence of release from the facility to the environment exists. Because the contaminants have a low leachability and because all residences and businesses downgradient from the facility are supplied with water from the New Milford Water Company (hydraulically upgradient from the BC facility), the actual or potential threat to human health and the environment is minimal." (Reference 22).

A 1989 Environmental Site Assessment conducted by Environmental Risk Limited stated that, "In conclusion, the environmental assessment indicates that the subject property does not appear to have been adversely impacted from an environmental perspective and that further subsurface investigation is not warranted at this time." (Reference 27).

However, there was no evidence of sediment sampling in the available file material. In November 1984, the Diventco Corporation was reportedly convicted in Superior Court for non-permitted discharges of untreated wastewater to the Housatonic River. The discharges occurred at least twice, on April 2 and June 15, 1984. Tests conducted by CTDEP determined that the wastewaters contained metals such as copper, tin, lead as well as suspended solids. It is suggested that sediment sampling be conducted in the Housatonic River before the facility can receive a CA725 YE designation.

V. Annotated Bibliography

1. Hazardous Waste Permit Application (Part A, with hand-written notations). Prepared by Ernest Fanwick, General Counsel, Candlewood-Burndy. November 17, 1980.

   Provides a Part A application listing a storage surface impoundment, a disposal surface impoundment, and a treatment tank.

2. Hazardous Waste Permit Application (Part A, with map). Prepared by Ernest Fanwick, General Counsel, Candlewood-Burndy. November 17, 1980.

   Provides a Part A application listing two storage surface impoundments, two disposal surface impoundments, a storage container, and a treatment tank.

3. Hazardous Waste Closure Plan - Burndy Candlewood Facility. Prepared by Roux Associates, Inc. May 31, 1983.

   Provides a closure plan for the hazardous waste generation and storage facility including an introduction and a sludge and soil sampling section.

4. Letter to Barry L. Giroux, CTDEP, from Michael H. Steinbach, Roux Associates. June 2, 1983.

   Provides the sludge and soil sampling section as noted in Reference 3.

5. Letter to Robert G. Cole, Burndy Corporation, from Paul H. Roux, Roux Associates. June 17, 1983.

   Letter regarding the potential for an impact on ground and surface waters resulting from leaching of sludge from a lagoon and two drying beds at the Burndy plant site.

6. Hazardous Waste Closure Plan for the Burndy Candlewood Facility. Prepared by Roux Associates. June 1983.

   Provides a closure plan including a schedule of closure; facility description; maximum capacities; decontamination procedures; site grading; zone of influence; groundwater monitoring and post-closure care; certification of closure; and closure cost estimates.

7. Public Notice of Receipt of a Hazardous Waste Management Facility Closure Plan. Prepared by Stanley Pac, CTDEP. July 16, 1983.

   Provides an introduction; a description of the facility; a summary of the closure plan; a notification of public comment and request for public hearing; and procedures for a final decision.

8. CTDEP Major Facilities Status Sheet. Prepared by E. Flores, CTDEP. July 18, 1983.

   Provides a 5-page checklist covering groundwater monitoring, closure procedures, and post-closure care.

9. CTDEP NPDES Permit. Prepared by CTDEP. July 10, 1979.

   Provides a State NPDES permit for discharge serial no. 001 for 3,840 gallons per day to flow into the Housatonic River.

10. CTDEP NPDES Permit. Prepared by CTDEP. July 10, 1979.

    Provides an additional copy of Reference 9.

11. Facility Biennial Hazardous Waste Report for 1982. Prepared by William J. Tracy, Attorney for Candlewood Burndy Corporation. April 30, 1984.

    Provides an 8-page biennial report for the management of hazardous waste at Burndy.

12. Hazardous Waste Permit Application (Part A, with map). Prepared by Ernest Fanwick, General Counsel, Candlewood-Burndy. November 17, 1980.

    Provides a part A permit application listing storage in two surface impoundments, disposal in two surface impoundments, storage in a container, and treatment in a tank.

13. CTDEP Phone Log Entry for conversation with William Tracy and Bob Cole, Burndy Corporation. July 19, 1985.

    Provides a letter regarding an extension in submitting a "3007 information request letter".

14. Section 3007 Compliance Report. Prepared by Burndy Corporation. November 15, 1985.

    Provides a 3007 Compliance Report including a map showing the facility boundaries and the locations of all solid waste management units (SWMUs); units other than SWMUs; and dates of last discharges into land disposal units.

15. CTDEP Order of the Commissioner, State of Connecticut vs. Burndy Corporation. January 6, 1986.

    Order regarding the facility's compliance with Connecticut's groundwater monitoring requirements.

16. CTDEP Order of the Commissioner, State of Connecticut vs. Burndy Corporation. January 6, 1986.

    Order regarding the facility's compliance with Connecticut's groundwater monitoring requirements.

17. Letter to Merrill S. Hohman, U.S. EPA Region 1, from William Tracey, Burndy Corporation. January 7, 1986.

    Provides a request for information pursuant to 3007 of RCRA.

18. Initial Screen of Land Disposal Facilities for Environmental Significance. Prepared by U.S. EPA Region 1. January 21, 1986.

    Provides a list of facilities which have operated land disposal units subject to RCRA.

19. Letter to Jonathan Walker, U.S. EPA Region 1, from Patrick Ford, GCA Corporation. May 2, 1986.

    Provides 23 additional Loss of Interim Status Inspection Reports, including one for Burndy.

20. Hazardous Waste Inspection Checklist. Prepared by B. Devine and D. Seresin, CTDEP. May 28, 1986.

    Provides an 11-page inspection checklist including a characterization of site activity; waste profile; inventory; records review; and financial requirements section.

21. Letter to Burndy Corporation, from Edward C. Parker, CTDEP. February 1, 1988.

    Provides a cover letter for a 1987 facility annual report.

22. Final Facilities Evaluation - Burndy Corporation. Prepared by PRC Environmental Management, Inc. February 3, 1988.

    Provides an introduction, interim status closure description, solid waste management units, and conclusions.

23. Final Initial Screen - Burndy Corporation. Prepared by PRC Environmental. February 3, 1988.

    Provides a checklist for general information, facility status/type, environmental significance, facility ranking Worksheet, and supplemental questions.

24. Letter to Michael J. O'Brien, U.S. EPA Region 1, from William J. Tracey, Burndy Corporation. June 14, 1990.

    Provides a document outlining the reasons why Burndy should not be required to submit a Part B Post-Closure Permit application.

25. Letter to William Tracey, Burndy Corporation, from Michael J. O'Brien, U.S. EPA Region 1. July 31, 1990.

    Provides a letter withdrawing the request for Burndy to submit a Part B Post-Closure Permit application.

26. Letter to Chris J. Totolis, CEE Associates, from Gerard Sotolongo, U.S. EPA Region 1. March 11, 1991.

    Provides a letter to confirm the telephone call from Michael J. O'Brien regarding CEE Associates request for an extension to complete a Part B application for a Post-Closure Permit.

27. Environmental Site Assessment. Prepared by Environmental Risk Limited. September 1989.

    Provides an introduction; physical setting and background information; and discussion and conclusions.

28. Hazardous Waste Treatment, Storage and Disposal Facilities Inspection Report. Prepared by CTDEP. April/May 1991.

    Provides a 16-page inspection report including a characterization of site activity; waste profile; records review; and financial requirements.

29. Letter to Edward Parker, CTDEP, from Joanne Levy Saboeiro - Peper, Martin, Jensen, Maichel and Hetlage. June 5, 1991.

    Provides a letter from attorneys representing the property owner at 71 Pickett District Road: R.A. Boehm. The letter is regarding the detection of elevated levels of certain halogenated organic volatiles in groundwater under the property which, according to the attorneys, originated at the adjacent Burndy site.

30. Letter to Michael J. O'Brien, U.S. EPA Region 1, from Joanne Levy Saboeiro - Peper, Martin, Jensen, Maichel and Hetlage. December 11, 1991.

    Provides a letter regarding the opposition by the R.A. Boehm facility of EPA's granting an equivalency determination for the closure of a lagoon and drying beds used by Burndy.

31. Groundwater Sampling Data. Prepared by CEE Associates. December 1991.

    Provides groundwater sampling data for monitoring wells MW-1 through MW-15 from December 1990 to March 1991.

32. Request for Status Change. Prepared by CTDEP. August 21, 1991.

    Provides a request for a status change for CEE Associates from large quantity generator to non-handler.

33. Joint Issuance of Public Notice. Prepared by CTDEP and U.S. EPA Region 1. January 15, 1992.

    Provides a public notice of CEE Associates attempt to demonstrate that the closure of its metal hydroxide surface impoundments pursuant to interim status regulations meets the clean closure standards for closure by removal.